ivised 09/04

CORRES. CONTROL
INCOMING LTR NO.
20443RF04
)UE DATE
\CTION

Department of Energy

ROCKY FLATS PROJECT OFFICE
10808 HIGHWAY 93, UNIT A
GOLDEN, COLORADO 80403-8200

SEP 2 8 2004

RECEIVED
2004 OCT -6 A 3:25
CORRESPONDENCE CONTROL

04-DOE-00722

DIST.	LTR	ENC
BERARDINI, J.H.	X	X
BOGNAR, E.S.	X	X
BROOKS, L.	X	X
BUTLER, L.	X	X
CARPENTER, M.	X	X
IUCCI, J.A.		
CROCKETT, G. A.		
DECK, C. A.		
DEGENHART, K. R.	X	X
DIETER, T. J.		
FERRERA, D. W.	X	X
GIACOMINI, J. J.		
LINDSAY, D. C.	X	X
LONG, J. W.		
LYLE, J. L.		
MARTINEZ, L. A.	X	X
NAGEL, R. E.	X	X
NESTA, S.	X	X
NORTH, K.	X	X
SHELTON, D. C.	X	X
SPEARS, M. S.	X	X
PIZZUTO, V.M.		
TUOR, N. R.	X	X
WIEMELT, K.	X	X
WILLIAMS; J. L.		
ZAHM, C.	X	X
Foss, D	X	X
Fibbs, F	X	X
COR. CONTROL	X	X
ADMIN. RECORD	X	X
PATS/130		

Reviewed for Addressee
Corres. Control RFP
10/6/04 LC
Date By

Ref. Ltr. #

DOE ORDER #
5400.1

1/1

Mr. Steven H. Gunderson
Rocky Flats Cleanup Agreement Project Coordinator
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Dear Mr. Gunderson:

In accordance with the Rocky Flats Cleanup Agreement (RFCA) Standard Operating Protocol (RSOP) for Facility Disposition, this letter and its enclosures is notification for RSOP implementation. This notification will utilize a combined RSOP strategy for demolition:

- The portions of the building that meet unrestricted release will be demolished in accordance with the *RSOP for Facility Disposition.*
- The portions of the building that do not meet unrestricted release will be removed in accordance with the *RSOP for Component Removal, Size Reduction, and Decontamination Activities, Section 3.8.*
- The slab will remain in place and protected until the entire building has been demolished; the slab will be removed in accordance the *RSOP for Environmental Remediation.*

This notification is for all activities required to demolish the Building 883 C-side, office area, and annex. These portions of Building 883 need to be removed in order to allow access to the production area of the building for large equipment removal. Specifically, this notification includes Rooms 104, 104A, 116, 117, 118, 120, 121, 122, 130A, 130, 1308, 135, 137, 138, 138AI, 139, 140, 140A, 141, 142, 143, 143A, 144, 145, 214, 215, 216, 217, 218, 219, 220, 220A, and 301. The enclosed figures show the areas addressed by this notification. This notification does not include the slab. The slab will remain in place and protected until the entire building has been demolished; the slab will be removed in accordance the *RSOP for Environmental Remediation.* This approach is due to residual contamination in the expansion joints and pits, and potential to encounter groundwater during the slab and pit removal.

Progress, status and work planning will be conducted in accordance with the consultative process at biweekly status meetings for this project. The project will not implement activities covered by this notification until the following have been completed or obtained: the CDPHE approval of the notification; CDPHE approval on the appropriate PDSRs and radiological and beryllium surveys for the areas that do not meet the unrestricted release criteria; and discussions of the project with the public stakeholders.

RECEIVED
OCT 6 2004

ADMIN RECORD

B883-A-000026

The work notification covered by this will be conducted by Kaiser-Hill Company, LLC (K-H). The requirements, methods, controls, and processes outlined in the RSOP will be followed. This work will be conducted in accordance with the work control documentation prepared by K-H and its subcontractor. The exact methods and process and progress of the activities will be communicated to the Department of Energy/Lead Regulatory Agencies through the consultative process. A schedule for this work is enclosed.

Questions may be directed to Gary P. Morgan at (303) 966-6003.

Sincerely,

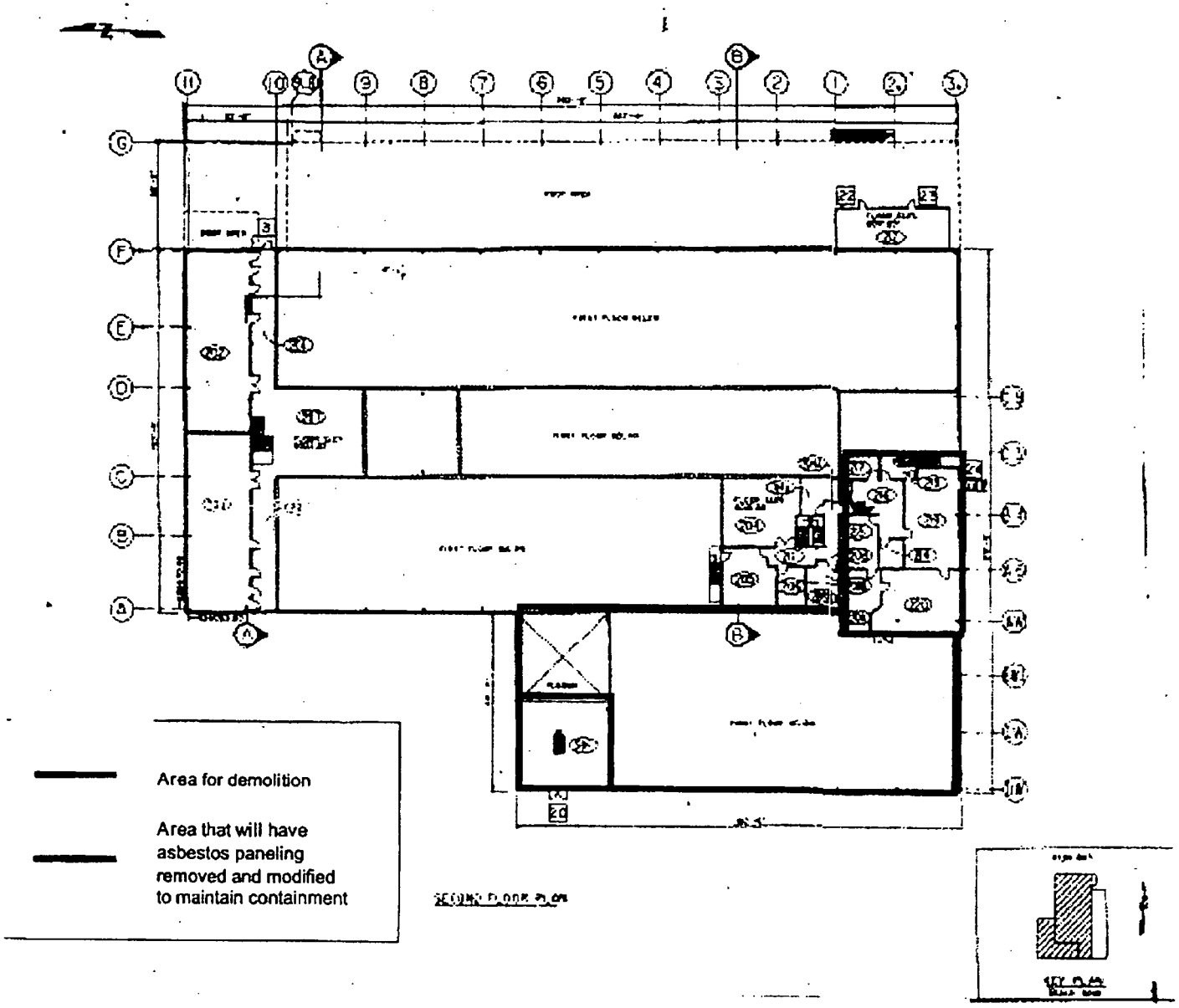
Joseph A. Legare, Director
RFPO Project Management

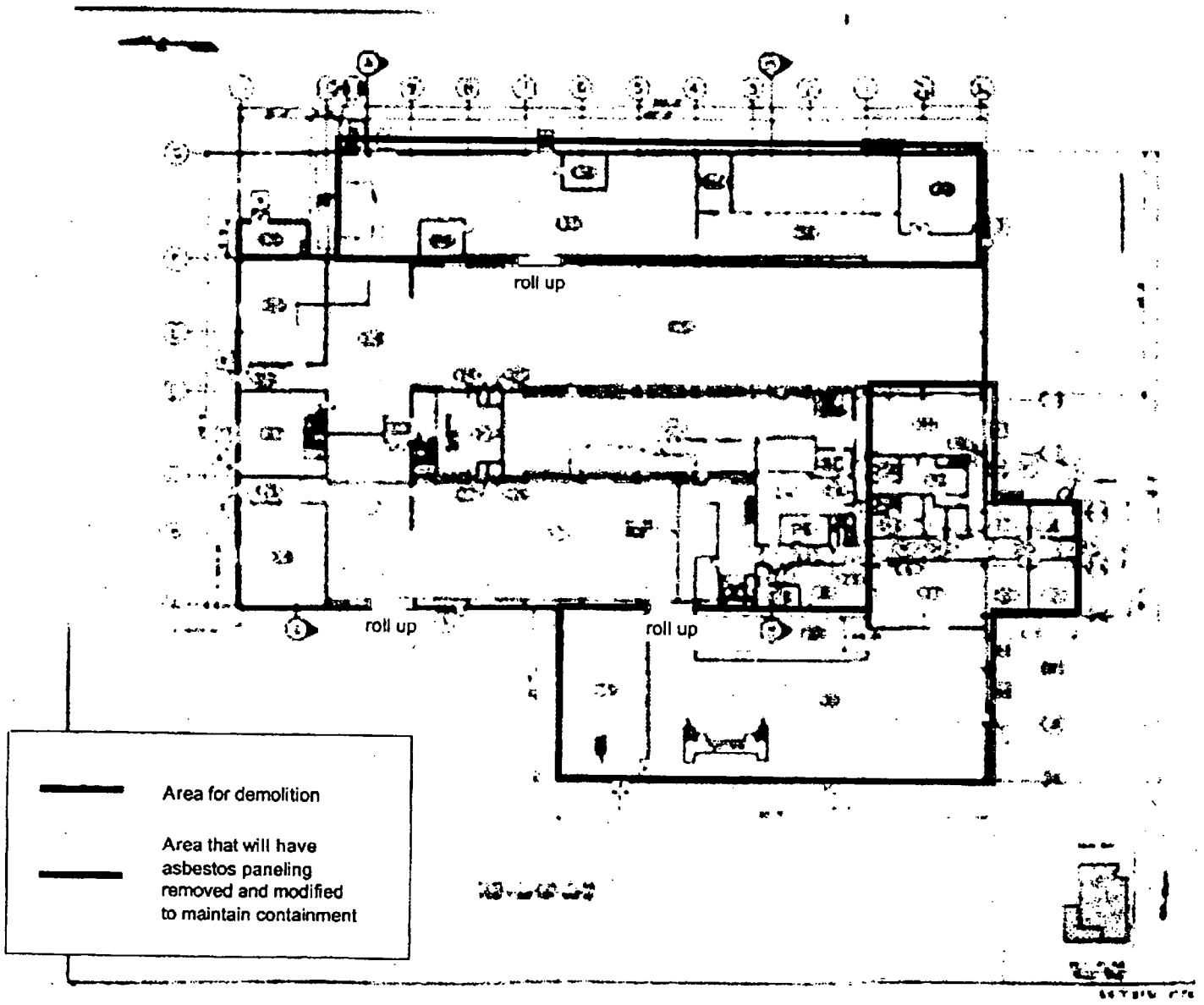
Enclosure

cc w/o Encl.:
G. Morgan, HQCPM, RFPO
F. Gibbs, K-H RISS
S. Nesta, K-H RISS D&D
D. Foss, K-H RISS D&D
M. Aguilar, USEPA

cc w/Enc:
F. Lockhart, OOM, RFPO
Administrative Record

2


Area for demolition
Area that will have asbestos paneling removed and modified to maintain containment


roll up
roll up
roll up
Area for demolition
Area that will have asbestos paneling removed and modified to maintain containment

Building 883 is a high-bay single story structure with a thirty-eight foot ceiling, has a partial basement, and a small second floor on the north and south ends. The structure covers 76,500 square feet. An underground reinforced concrete tunnel connects Building 883 with Building 881, which was blocked on both sides of the tunnel with a cinder block wall during Building 881 decommissioning. The facility has three functional divisions referred to as Sides A, B, and C. The original construction was designed with two functional areas to prevent cross-contamination events (Sides A and B), and Side C was added to facilitate the manufacture of armor plates for tanks. Original construction took place between 1956 and 1957. Four additions have been built since the original construction in 1956:

- 1958, the Annex, increased storage capacity added on the east side,
- 1968, increased the area and manufacturing capacity of the high-bay and low bay,
- 1972, Valve House addition built to house the main steam valves, and
- 1985, added manufacturing space (Side C) on the west side of the structure to accommodate the manufacture of armor plates.

The building is set on concrete foundations composed of individual spread footings, concrete pedestals, concrete grade beams, combined footings, and foundation walls. The Building 883 structure is constructed of structural steel framing for the exterior walls and roof, and is built on concrete slabs placed on grade. The steel framing is covered with corrugated cement asbestos panels on the exterior, and most of the interior perimeter walls are covered with painted cement asbestos panels. The roof is metal decking with built-up roofing material. The floor slab in the basement is eight-inch thick wire mesh reinforced concrete slab on grade. The first floor slabs are constructed of six-inch thick wire mesh reinforced concrete slab on grade, and the first floor over the basement area is six-inch reinforced concrete. The heavy manufacturing equipment is placed on isolated concrete padded pedestals where appropriate. Building 883 was designed as a manufacturing facility for the rolling and forming of enriched uranium, depleted uranium, binary metals, and beryllium. Operations included rolling, shearing, forging, pressing, grinding, punching, bending, welding, heating, annealing, and cleansing. Also included were the inspection, non-destructive testing, weighing and shipping of parts fabricated in the facility. Operations in the facility included:

- Depleted uranium ingots were hot rolled and formed into various weapons parts, and manufacture of weapons parts from enriched uranium occurred from 1957 to 1964.
- Binary metal ingots were heated in an Argon atmosphere, and rolled into sheets used to manufacture weapons parts.
- Stainless steel encased beryllium ingots were heated and rolled into sheets. The stainless sheet was removed, and the beryllium was rolled into specific thickness, heat-treated, and pressed into the desired shapes.
- Operations continued in the facility until 1994, when all operations ceased.
- Facility decommissioning was initiated 2002 in accordance with the *RSOP for Component Removal.*

5

Removal, Size Reduction and Decontamination Activities. Loose and fixed equipment have been removed from these areas. The C-side and annex were pressure washed with water and a degreaser to initiate decontamination activities. The pressure washing was to remove the gross beryllium contamination for worker safety purposes; however, after the pressure washing was complete, the uranium and beryllium contamination was reduced substantially. The floors that were above unrestricted release were scabbled with the concrete shavers. After these activities were completed, in-process beryllium and radiological surveys were conducted.

Based on the surveys, the decontamination efforts were highly successful with some exceptions. There is a berm between the floor and wall in the annex that cannot be decontaminated. In addition, there are cracks and expansion joints in the slab, which contain contamination that is not accessible through scabbling. These decontamination activities and results were discussed with Colorado Department of Public Health and Environment (CDPHE) on August 19, 2004, and there was a general agreement that the decontamination efforts had been exhausted and the demolition removal will proceed as follows:

- All contaminated areas will be pressured washed.
- All contaminated floors will receive at least one pass with the concrete shaver.
- The sequence is a complete list of activities; some of the activities have already been completed, as indicated in the letter.

In process surveys will be conducted on areas with some residual contamination and fixative will be applied. Information on residual contamination will be provided to the Rocky Flats Environmental Technology Site (Site or RFETS) air quality group for an assessment of potential air emission impacts during demolition. Pre-demolition surveys will be conducted on areas that meet unrestricted release. The asbestos and asbestos panels will be removed. The RCRA units will be closed. Chemicals will be removed from these areas. Openings to the main building (A and B-sides) will be barricaded to maintain containment. The portions of the building that meet unrestricted release will be demolished in accordance with the *RSOP for Facility Disposition.* The portions of the building that do not meet unrestricted release will be removed in accordance with the *RSOP for Component Removal, Size Reduction, and Decontamination Activities, Section 3.8.* The slab will remain in place and metal plates will be placed over the areas that will be used for access to remove equipment from the building (A and B-sides). Once the main portion of the building is demolished, the slab will be removed in accordance with the *RSOP for Environmental Remediation* Section 3.8.1 of the *RSOP for Component Removal, Size Reduction, & Decontamination Activities* requires the following assessment:

(1) Relative Cost - There is no relative cost for this activity. The contaminated areas cannot be removed prior to demolition because they are on the lower portions of the wall, which would cause a structural issue, or would require removal of portions of the slab, which increase risks to workers from hoisting, rigging, and falls and increases the potential for contamination spread to the area below the slab.

(2) Structural Evaluation - The work package will be reviewed and signed off by a structural engineer.

6

(3) Air Emissions - An analysis of the potential emissions will be completed by the air quality group. Dust and contamination control will include the application of fixative, water during removal, and placement of the contaminated materials in waste containers as soon as the material is size reduced. These measures will be included in the work package.

(4) Dust Generation - An analysis of the potential emissions will be completed by the air quality group. Dust and contamination control will include the application of fixative, use of water during removal, and placement of the contaminated materials in waste containers as soon as the material is size reduced. These measures will be included in the work package.

(5) Impacts to Surface Water - It is anticipated that this activity will have a minimal impact on surface water. In accordance with the RFETS Erosion Control Management System Manual, an assessment of the area will be conducted and controls put in place prior to initiating demolition removal. Placement of surface water controls will be prerequisites in the work package for demolition removal.

(6) Impacts to Migratory Bird - There are no birds nests associated with these areas, and continual walk-downs will be completed until the demolition removal is complete. This activity will be discussed with the public on September 21, 2004, and follow-up meetings will be held with the public as their interest indicates is appropriate. The administrative record requirements for this activity include the following:

- Final RFCA closeout report
- RFETS Decommissioning Program Plan (DPP)
- RSOP for Facility Disposition
- RSOP for Component Removal, Size Reduction and Decontamination Activities
- RSOP for Environmental Remediation
- PDSR Building 883 C-side, Offices, and Annex
- Notification Letter and subsequent CDPHE correspondence, if appropriate.

7/1